

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. **(Currently Amended)** A method of dynamically determining an optimal advertisement to be used by an Internet merchant, comprising:

(a) receiving configuration data from the Internet merchant, wherein such configuration data comprises: ~~a percentage~~

a sample size of visitors to the Internet website who are to participate in an experiments experiment, and

time-related information concerning the ~~experiments~~ experiment;

(b) randomly choosing visitors to the Internet website to comprise a sample of visitors to participate in the ~~experiments~~ experiment according to the configuration data;

(c) running the ~~experiments~~ experiment according to the configuration data ~~on~~ on the randomly chosen ~~visitors~~ sample of visitors to produce sampling data, wherein the experiment comprises:

presenting a plurality of varied advertisements to different visitors within the sample according to the configuration data; and

measuring the effectiveness of the plurality of varied advertisements on the sample;

(d) dynamically determining an optimal advertisement using real time analysis of the sampling data from the experiment, ~~wherein the determination of the optimal advertisement involves real time learning from the analyses of the experiments of step (e);~~ and

(e) thereafter using the optimal advertisement determined in step (d).

2. **(Previously Presented)** The method of claim 1, wherein step (d) comprises determining an advertisement that optimizes highest click-through rate.

3. **(Previously Presented)** The method of claim 1, wherein step (d) comprises determining an advertisement that optimizes highest buy-rate.

4. **(Previously Presented)** The method of claim 1, wherein step (d) comprises determining an advertisement that optimizes a combination of click-through rates and buy-rates.

5. **(Original)** The method of claim 4, wherein the combination is determined through a weighted formula.

6. **(Original)** The method of claim 1, wherein said configuration data includes sampling parameters.

7. **(Previously Presented)** The method of claim 1, where said configuration data includes potential advertisements that are offered to the sampled visitors in step (c).

8. **(Original)** The method of claim 1, wherein said configuration data includes whether the sampling is to be performed continuously or at discrete intervals.

9. **(Previously Presented)** The method of claim 1, wherein said configuration data includes data for segmenting the visitors into clusters.

10. **(Original)** The method of claim 1, wherein said configuration data includes a minimum threshold for automatically propagating an optimal advertisement.

11. **(Currently Amended)** The method of claim 1, wherein said random sampling is performed on the entire population of visitors to the Internet website.

12. **(Currently Amended)** The method of claim 1, wherein visitors to the Internet website are grouped, and each group is sampled separately.

13. **(Previously Presented)** The method of claim 12, wherein the optimal advertisement determined for each group optimizes price.

14. **(Currently Amended)** The method of claim 13, additionally comprising updating the Internet website such that a visitor is presented with the optimal advertisement determined in step (d) according to the visitor's group.

15. **(Original)** The method of claim 12, wherein groups are determined based upon prior purchasing behavior.

16. **(Original)** The method of claim 12, wherein groups are determined based upon demographic characteristics.

17. **(Currently Amended)** The method of claim 1, additionally comprising:

(d) automatically updating the Internet website to use the optimal advertisement determined in step (c).

18. **(Currently Amended)** The method of claim 1, additionally comprising:

(d) automatically updating the Internet website to use the optimal advertisement determined in step (c) if the determination for the optimal advertisement meets a minimum threshold.

19. **(Currently Amended)** The method of claim 18, wherein the minimum threshold is ~~that the optimal determined in step (c)~~ is a predetermined percentage better than a currently offered advertisement.

20. **(Currently Amended)** A method of dynamically determining an optimal advertisement to be used by an Internet merchant, comprising:

(a) receiving configuration data from the Internet merchant, wherein such configuration data comprises: ~~a percentage~~

a sample size of visitors to the Internet website who are to participate in an ~~experiments~~ experiment; and

time-related information concerning the ~~experiments~~ experiment;

(b) randomly choosing visitors to the Internet website to comprise a sample of visitors to participate in the ~~experiments~~ experiment according to the configuration data;

(c) running the ~~experiments~~ experiment according to the configuration data ~~on~~ on the randomly chosen ~~visitors~~ sample of visitors to produce sampling data, wherein the experiment comprises:

presenting a plurality of varied advertisements to different visitors within the sample according to the configuration data; and

measuring the effectiveness of the plurality of varied advertisements on the sample;

(d) dynamically determining an optimal advertisement using real time analysis of the sampling data from the experiment, wherein the determination of the optimal advertisement involves real-time learning from the analyses of the experiments of step (e);

(e) thereafter using the optimal advertisement determined in step (d); and

(f) repeating steps (a) - (e) using ~~the determinations made~~ sampling data obtained in step (c) as configuration data in step (a).

21. (Cancelled)

22. (Cancelled)